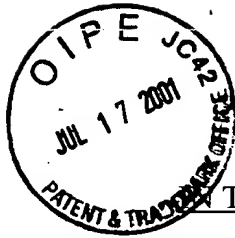


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PATENT  
Attorney Docket No.: PHO-0002 DIV

THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Eric Wachter, et al.

Serial No.: 09/072,962/3

Filed: May 5, 1998

Examiner:

Art Unit:

For: METHOD FOR IMPROVED SELECTIVITY  
IN PHOTOACTIVATION AND  
DETECTION OF MOLECULAR  
DIAGNOSTIC AGENTS

Commissioner for Patents  
Washington, D.C. 20231

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)  
) Date: July 12, 2001

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STATUS INQUIRY - SECOND REQUEST

Gentlemen:

Please advise as to the status of the above-identified patent application.

Enclosed herewith is a copy of the return postcard which we received from the Patent Office on May 11, 1998. The postcard indicates Serial No. 09/072,962, and a filing date of May 5, 1998 was assigned to this application. Also enclosed is the Express Mail Receipt, the Transmittal and the first page of the application, all indicating the filing date of May 5, 1998. Applicants have also filed several other documents in support of this application but have not received any further communications from the Patent Office.

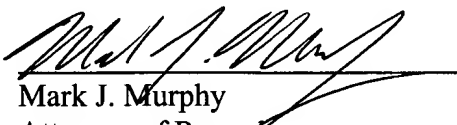
In a telephone conversation with Mrs. Newman of the Office of Initial Patent Examination on May 31, 2000, we were advised that this application was assigned the same serial number (Serial

No. 09/072,962) as Patent No. US 6,096,036. The inventor on this patent is Bowe et al. and the patent indicates a filing date of May 5, 1998. This patent is unrelated to Applicants' application.

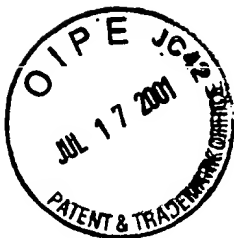
Accordingly, the Applicants respectfully requests the current status of the above-identified patent application.

Respectfully submitted,

Dated: July 12, 2001

  
Mark J. Murphy  
Attorney of Record  
Registration No. 34,225

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COOK, McFARRON & MANZO

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HERETO, ACKNOWLEDGES RECEIPT OF:

(X) Declaration and Power of Attorney  
ENCLOSURES:

(X) Application Divisional patent  
(X) Drawing(s) 14 (F)      (INF.) X  
(X) Check \$ 395.00 No: 33154  
( ) Citation Prior Art  
( ) Claim Priority **jc541 U.S. PTO**  
( ) Extension of Time (duplicate) **09/072962**  
( ) Communication to Examiner **08/08/98**  
(X) Amendment Preliminary A  
( ) Amendment after FINAL Rejection  
( ) PTO Fee Form  
( ) Assignment (X) Appointment of Associate  
( ) Certified copy Attorneys  
(X) Revocation of Power of Prior P.O.A. and  
( ) Appt. of new Power of Attorney  
(X) Stmt of Status as Small Entity  
RE: APPLICATION ATTY/SEC: MJM:s

Applicant: ERIC WACHTER, et al.

Our File No: PHO-002 DIV S.N.     

Filed On herewith

For: METHOD FOR IMPROVED SELECTIVITY ...

DATE DUE:      DATE SENT: 5-5-98

CASE PHO-0002DIV; 09/072,962  
DKI DATE 8/5/98  
FINAL DATE 5/5/99 RECD SENT  
SUBJECT Prior art + foreign filing

CN 5/11/98

PATENT APPLICATION

METHOD FOR IMPROVED SELECTIVITY IN PHOTO-ACTIVATION AND  
DETECTION OF MOLECULAR DIAGNOSTIC AGENTS

“Express Mail” Mailing Label No. E10239  
732794S  
Date of Deposit MAY 5, 1998

Inventors: Eric A. Wachter  
138 Bay Path Drive  
Oak Ridge, Tennessee 37830

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Knoxville, Tennessee 37931

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Name Casindra Himmelstein  
(typed or printed)

Signature Casindra Himmelstein

Richard M. Kessler, Esq.  
11324 Gates Mill Drive  
Knoxville, Tennessee, 37922-1752  
(423) 777-0244

Docket No. PHO-0002

\* \* \*

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Date of Deposit October 30, 1996

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Richard M. Kessler  
(Typed or printed name of person mailing paper or fee)

RM Kessler  
(Signature of person mailing paper)

## METHOD FOR IMPROVED SELECTIVITY IN PHOTO-ACTIVATION AND DETECTION OF MOLECULAR DIAGNOSTIC AGENTS

This invention was made with Government support under Contract No. DE-AC05-84OR21400 awarded by the U.S. Department of Energy to Lockheed Martin Energy Systems, Inc. Lockheed Martin Energy Systems and the Oak Ridge Associated Universities have waived rights to this invention to the inventors. The Government has rights in this invention pursuant to Contract  
5 No. DE-AC05-84OR21400 awarded by the U.S. Department of Energy.

### BACKGROUND OF THE INVENTION:

#### Field of the Invention:

The present invention relates generally to methods and apparatus for remotely effecting spatially-selective photo-activation of one or more molecular agents and for improving the detection  
10 of the diagnostic signals thereby produced. The method taught for effecting photo-activation utilizes the special properties of non-linear optical excitation for promoting an agent from one molecular energy level to another with a high degree of spatial and molecular specificity. The special features of this method are applicable for activation of various endogenous and exogenous imaging agents, and in particular afford distinct advantages in the diagnosis of diseases in humans  
15 and animals. Specifically, use of non-linear excitation methods facilitate controlled activation of diagnostic agents in deep tissue using near infrared to infrared radiation, which is absorbed and scattered to a lesser extent than methods and radiations currently used. Combination of these non-linear excitation methods with advanced signal encoding and processing methods greatly increases sensitivity in the detection of diagnostic signals.

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Bib Data Sheet

CONFIRMATION NO. 7144

<b>SERIAL NUMBER</b> 09/072,963	<b>FILING DATE</b> 05/05/1998 <b>RULE</b>	<b>CLASS</b> 128	<b>GROUP ART UNIT</b> 3737	<b>ATTORNEY DOCKET NO.</b> PHO-0002-DIV	
<b>APPLICANTS</b> ERIC A. WACHTER, OAK RIDGE, TN; WALTER G. FISHER, KNOXVILLE, TN; H. CRAIG DEES, KNOXVILLE, TN;					
<b>** CONTINUING DATA *****</b> THIS APPLICATION IS A DIV OF 08/741,370 10/30/1996 PAT 5,832,931					
<b>** FOREIGN APPLICATIONS *****</b>					
<b>IF REQUIRED, FOREIGN FILING LICENSE GRANTED** SMALL ENTITY **</b> <b>** 05/22/1998</b>					
Foreign Priority claimed <input type="checkbox"/> yes <input type="checkbox"/> no 35 USC 119 (a-d) conditions <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> Met after met Allowance Verified and Acknowledged _____ Examiner's Signature Initials		<b>STATE OR COUNTRY</b> TN	<b>SHEETS DRAWING</b> 13	<b>TOTAL CLAIMS</b> 10	<b>INDEPENDENT CLAIMS</b> 2
<b>ADDRESS</b> EDWARD D. MANZO COOK, MCFARRON & MANZO, LTD. 200 W. ADAMS ST. STE. 2850 CHICAGO ,IL 60606					
<b>TITLE</b> METHODS FOR IMPROVED SELECTIVITY IN PHOTO-ACTIVATION AND DETECTION OF MOLECULAR DIAGNOSTIC AGENTS					
<b>FILING FEE RECEIVED</b> 395	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:		<input type="checkbox"/> All Fees <input type="checkbox"/> 1.16 Fees ( Filing ) <input type="checkbox"/> 1.17 Fees ( Processing Ext. of time ) <input type="checkbox"/> 1.18 Fees ( Issue ) <input type="checkbox"/> Other _____ <input type="checkbox"/> Credit		



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